

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number
WO 2005/053187 A1

(51) International Patent Classification⁷: **H04B 7/26**

(21) International Application Number:
PCT/KR2004/001044

(22) International Filing Date: **6 May 2004 (06.05.2004)**

(25) Filing Language: **Korean**

(26) Publication Language: **English**

(30) Priority Data:
10-2003-0084365
26 November 2003 (26.11.2003) **KR**

(71) Applicant (for all designated States except US): **ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE [KR/KR]; 161, Gajeong-dong, Yuseong-gu, Daejon 305-350 (KR).**

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HONG, Yong-Geun [KR/KR]; #115-903 Hanmaeul Apt., 200-4, Song-gang-dong, Yuseong-gu, Daejon 305-756 (KR). SHIN, Myung-Ki [KR/KR]; #102-603 Expo Apt., 464-1, Jeon-min-dong, Yuseong-gu, Daejon 305-761 (KR). PARK,**

Jung-Soo [KR/KR]; #107-501 Hanmaeul Apt., Song-gang-dong, Yuseong-gu, Daejon 305-756 (KR). KIM, Hyoung-Jun [KR/KR]; #110-1004 Hanul Apt., Sinsseong-dong, Yuseong-gu, Daejon 305-707 (KR). PARK, Ki-Shik [KR/KR]; #101-602 Hanbit Apt., Eoeun-dong, Yuseong-gu, Daejon 305-755 (KR).

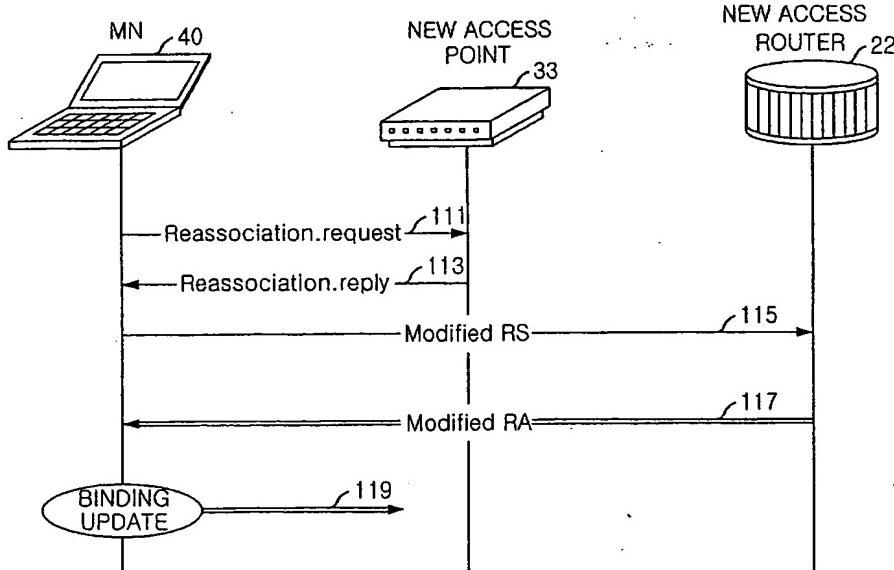
(74) Agent: **SHINSUNG PATENT FIRM; 2F, Line Bldg., 823-30, Yeoksam-dong, Gangnam-ku, Seoul 135-080 (KR).**

(81) Designated States (unless otherwise indicated, for every kind of national protection available): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): **ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,**

[Continued on next page]

(54) Title: ACCESS ROUTER BASED MOBILE IPV6 FAST HANDOVER METHOD



(57) Abstract: Provided is a mobile IPv6 fast handovers method, which includes the steps of: a) if a mobile node is moved in a layer 2, receiving a modified RS message from a mobile node in the access router; b) detecting movement of the mobile node in a layer 3 in the access router; c) if the mobile node makes a movement in the layer 3, generating CoA of the mobile node in the access router; d) performing Duplicate Address Detection in the access router to inspect uniqueness of the generated CoA; and e) transmitting a modified RA message to the mobile node in the access router. The Fast Handovers method of the present research performs fast movement detection by using layer 2 information simply and efficiently for fast handover in the mobile IPv6 and generates CoA in the access router instead of the mobile node without operations of many additional messages.

WO 2005/053187 A1



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

- *as to non-prejudicial disclosures or exceptions to lack of novelty (Rule 4.17(v)) for all designations*
- *as to non-prejudicial disclosures or exceptions to lack of novelty (Rule 4.17(v)) for all designations*

Declarations under Rule 4.17:

- *as to non-prejudicial disclosures or exceptions to lack of novelty (Rule 4.17(v)) for all designations*
- *as to non-prejudicial disclosures or exceptions to lack of novelty (Rule 4.17(v)) for all designations*
- *as to non-prejudicial disclosures or exceptions to lack of novelty (Rule 4.17(v)) for all designations*

Published:

- *with international search report*
- *with a declaration as to non-prejudicial disclosures or exceptions to lack of novelty*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.